



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/844,965	04/27/2001	Sally Kay Swart	163.1385US01	1666
23552	7590	06/14/2006	EXAMINER	
MERCHANT & GOULD PC			JASTRZAB, KRISANNE MARIE	
P.O. BOX 2903			ART UNIT	
MINNEAPOLIS, MN 55402-0903			PAPER NUMBER	

1744

DATE MAILED: 06/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/844,965

Applicant(s)

SWART ET AL

Examiner

Krisanne Jastrzab

Art Unit

1744

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 31 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) See Continuation Sheet is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 5-6, 8-12, 14, 18-25, 29, 31-33, 36-47, 55-56, 58-60, 67-68, 70-72 and 75-76 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

Continuation of Disposition of Claims: Claims pending in the application are 1,5,6,8-12,14,18-25,29,31-33,36-47,55,56,58-60,67,68,70-72,75 and 76.

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 2/24/2006 has been entered.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 5-6, 8-12, 14, 18-25, 29, 31-33, 36-47, 55-56, 58-60, 67-68, 70-72 and 75-76 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is noted that the claims are replete with grammatical errors.

With respect to claim 1 and all depending claims, "the object" lacks proper antecedent basis.

Further with respect to claim 1, the language for both the "sonicator" and the "liquid transporter" is found to be confusing because the description of the location and activity thereof is not clear. Also, within the section describing the "emitter", the recitation of "the antimicrobial composition" lacks proper antecedent basis because the

compositions were recited as choices not requiring the presence of the antimicrobial composition. It is further noted that the “wherein” statement at the end of the claim fails to add any positive limitation to the claimed invention because it is improperly attempting to limit structure which was not previously positively required by the claim (recitation in the preamble does not require the specific presence in the apparatus). Additionally, the use of parenthesis within the body of a claim is improper.

With respect to claim 6, this claim is found to be vague and indefinite because it is unclear if the probe is “outside” or if the energy is “outside” and it is further unclear as to what would constitute “outside”.

With respect to claim 8, this claim is found to be vague and indefinite because it is unclear whether a second holder is being claimed or if the position of the previously cited holder is being re-defined. Clarification is required.

With respect to claim 9, this claim fails to properly further limit the claim from which it depends because the method phraseology fails to set forth any further structural limitation.

With respect to claim 11, this claim also fails to properly further limit the claim from which it depends because it merely recites method phraseology and the functions already set forth in the independent claim.

With respect to claim 12, this claim fails to provide any further structural limitation to the apparatus set forth in claim 1.

With respect to claim 14, this claim merely recites method phraseology and therefor fails to properly further limit the apparatus claim from which it depends, and “the

wash composition" lacks proper antecedent basis because it was set forth as optional in the independent claim, not required.

With respect to claim 18, "the antimicrobial composition" lacks proper antecedent basis because it was set forth as optional in the independent claim, not required.

With respect to claim 21, sources of the compositions were not provided in the independent claim, therefore this claim fails to properly further limit the structure of the independent claim.

With respect to claim 23, this claim is found to be vague and indefinite because it recites the addition of concentrate, but fails to indicate to what or where the addition occurs within the claimed structure.

With respect to claim 29, this claim is found to be vague and indefinite because it improperly attempts to define the apparatus by itself with the recitation of "the system" in the body of the claim.

With respect to claims 31, 43, 55, 67 and 76, these claims are found to be vague and indefinite because it is unclear whether they are attempting to claim multiple stations identical to that recited in the independent claim as all of the elements of claim 1 are reiterated and further stations are broadly referred to. Clarification is required.

Further with respect to claim 55, this claim is further confusing because it refers to a "fourth station" as circulating at a "second station". Clarification is required.

With respect to claims 32, 59 and 71, the recitation of "the liquid transport system" lacks proper antecedent basis in these claims.

Art Unit: 1744

With respect to claims 36-39, 58, 70 and 75, these claims fail to properly further limit the apparatus claim from which they depend because they merely recite method phraseology that does not set forth further structural limitations. It is noted that sources of the compositions were not provided in the independent claim.

With respect to claims 42, 43, 56 and 68, these claims are found to be vague and indefinite because they recite that certain stations comprise a dryer which would not be capable of performing the circulating functions set forth in the original recitation of these stations. Clarification is required.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of

Art Unit: 1744

the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1, 5-6, 8-12, 14, 18-25, 29, 31-33, 36-47, 55-56, 58-60, 67-68, 70-72 and 75-76 are rejected under 35 U.S.C. 103(a) as being unpatentable over either Boucher U.S. patent No.'s 3,708,263 or 3,837,805 in view of any of Halaka U.S. patent No. 6,071,480 or DiGeronimo U.S. patent No. 4,494,357 or Ramachandran U.S. patent No. 4,720,374.

The Boucher patents teach substantially the invention as claimed, namely the treatment of medical or dental instruments through a plurality of treatment stations including sonicated liquid treatment and rinse, followed by heated air drying and irradiation. The articles to be treated are placed in a basket to maintain their position during treatment and are conveyed from station to station. The Boucher patents are silent as to the use of a moveable probe capable of manual sonic cleaning. See the figures, column 7, line 62 through column 10, line 3.

All of Halaka, DiGeronimo and Rmachandran teach the well recognized efficacy of moveable sonicators or probes for the provision of ultrasonic energy in liquid containing treatment devices, as well as their equivalence to wall mounted transducers.



See column 1, lines 15-40 and the figures of Halaka, Fig. 1 and column 2, lines 40-45 of DiGeronimo and column 9, line 19 through column 10, line 2 of Ramachandran

It would have been obvious to one of ordinary skill in the art to substitute a sonicator or probe as taught in any of Halaka, DiGeronimo or Ramachandran for the wall mounted transducers of the Boucher patents because of their recognized equivalence in the provision of sonic energy within a treatment liquid.

It is further noted that the Boucher references teach as least two sonicating stations and it would have been well within the purview of one of ordinary skill in the art to art to provide as many as determined to be required to optimize treatment of the article.

Claims 1, 5-6, 8-12, 14, 18-25, 31-33, 36-47, 55-56, 58-60, 67-68, 70-72 and 75-76 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moyers U.S. patent No. 6,090,213 in view of Aussenac GB 2,040,150 and any of of Halaka U.S. patent No. 6,071,480 or DiGeronimo U.S. patent No. 4,494,357 or Ramachandran U.S. patent No. 4,720,374 (all as applied above).

Moyers teaches an automated cleaning system configured with a variety of stations. Ultrasonic cleaning with liquid circulation is achieved within a tank means wherein the object being treated is immersed. The object is washed, rinsed, cleaned and then dried by the application of heated air circulated by a blower. Each treatment can be performed in a separate station. See Fig. 1, and column 3, line 3 through column 4, line 5 and the claims.

Art Unit: 1744

Aussenac clearly teaches the inclusion of a radiation source within a system comparable to that of the combination above, namely treatment of articles with a series of sonification, liquid circulation, rinsing and drying, wherein the radiation source (UV) is applied to enhance both sterilization and heating of the liquids utilized in the system.

It would have been obvious to one of ordinary skill in the art to substitute a sonicator or probe as taught in any of Halaka, DiGeronimo or Ramachandran for the wall mounted transducers of Moyers because of their recognized equivalence in the provision of sonic energy within a treatment liquid.

It would further have been obvious to one of ordinary skill in the art to include the radiation means as taught in Aussenac within the system of Moyers because it would enhance both the liquid treatment with heating and act to sterilize within the system as well.

### ***Response to Arguments***

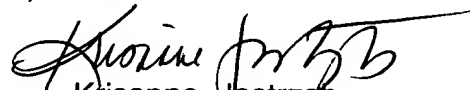
Applicant's arguments with respect to claims 1, 5-6, 8-12, 14, 18-25, 29, 31-33, 36-47, 55-56, 58-60, 67-68, 70-72 and 75-76 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Krisanne Jastrzab whose telephone number is 571-272-1279. The examiner can normally be reached on Mon.-Thurs. 6:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gladys Corcoran can be reached on 571-272-1214. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Krisanne Jastrab  
Primary Examiner  
Art Unit 1744

June 12, 2006